

VOLYNKIN, N.I.

Synthesis of organic stabilizers for photographic printing paper
and the study of the chemical action of stabilization. Trudy LIKI
no.4:150-155 '56. (MLRA 10:5)

1.Kafedra obshchey analiticheskoy i organicheskoy khimii.
(Photography--Printing papers)

"APPROVED FOR RELEASE: 08/09/2001

CIA-RDP86-00513R001860730004-2

VOLYAKIN

APPROVED FOR RELEASE: 08/09/2001

CIA-RDP86-00513R001860730004-2"

VOLYNKIN, N. I.

79-2-45/58

AUTHOR:

Volynkin, N. I.

TITLE:

Method of Synthesizing Arylthioureas and Homologous Mustard Oils (Metod sin-teza aryltioomochevin i sootvetsvuyushchikh gorchichnykh Masel)

PERIODICAL:

Zhurnal Obshchey Khimii, 1957, vol 27, No 2, pp. 483-485 (U.S.S.R.)

ABSTRACT:

A comparison of the chemical properties of urea and thiourea revealed, in spite of the uniformity of certain reactions, certain characteristics inherent only to urea or thiourea. Urea is known in one form only but the derivation of O-alkyl derivative of urea in an alkali solution indicates the possibility of the existence of urea at pH greater than 7 in the form of iso-urea. Urea in a neutral and acid medium reacts perfectly normally. It was established that a greater part of the thiourea reaction corresponds to the structure of isothiourea, i. e., there is a tautomeric equilibrium between thio- and isothio- urea. The reaction of alkyl halides with thiourea derivatives. Oxidation of thiourea with potassium permanganate or ferric chloride in the presence of acid results in the formation of disulfide which also confirms the existence of thiourea mainly in iso-form. The author established the optimum conditions leading to the condensation of urea with amines, e. g. phenetidine, for the purpose of obtaining

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Method of Synthesizing Arylthioureas and Homologous Mustard Oils

phenetolecarbamide. It is explained that the thiourea-amine condensation takes place under conditions unfavorable for urea.

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A temperature of 120° plus and pH of about 6 promotes the condensation of thiourea and amine resulting in the formation of symmetrical aryl thioureas. The condensation of thiourea and amine at pH 6 leads to direct synthesis of mustard oil. Methods of synthesizing certain arylthioureas and homologous mustard oils from thiourea and aryleamines are described.

There are 9 references, of which 3 are Slavic

ASSOCIATION: Leningrad Institute of Cinema Engineers

PRESNETED BY:

SUBMITTED: May 14, 1955

AVAILABLE: Library of Congress

VOLYNKIN, N. M., Physician Cand. Med. Sci.

Dissertation: "Complications of Echinococcus of the Liver According to Data of the Medical Institutions of the Mongolian Peoples Republic," Second Moscow State Medical Inst., imeni I. V. Stalin, 20 Jan 47.

SO: Vechernyaya Moskva, Jan, 1947 (Project #17836)

VOLYNKIN, N. M.

PA 56/49T59

USSR/Medicine - Echinococcosis, Liver Jan 49
Medicine - Surgery

"Complications of Liver Echinococcosis," N. M.
Volynkin, 7 pp

"Khirurgiya" No 1

Discusses fibrous capsule of the echinococcus, or the adventitia, as some authors designate it. Concludes that echinococci, having settled in the organism of the intermediate host, live many years. Upon meeting conditions unfavorable for their existence, they do not die at once, but form new echinococcosis cysts both from elements of the chitinous shell and from free scolexes.

56/49T59

VOLYN'KIN, N. M.

USSR/Medicine - Multiple Arachnoid Jan/Feb 49
Endothelioma

Medicine - Neurosurgery

"Several Clinical Characteristics of Multiple
Arachnoid Endothelioma," N. M. Volyntkin
Moscow, Inst of Neurosurg Instn Acad N. N.
Burdenko, Acad Med Sci USSR, 7 pp

"Top Neurosurgery" No 1

Multiple arachnoid endothelioma may be indicated by the presence of multiple petrification or multiple hyperostosis and determined on clinical photographs. Treatment involves more than one operation. Since these tumors are

64/49T98

USSR/Medicine - Multiple Arachnoid Jan/Feb 49
Endothelioma (Contd)

systematic blastomatae, even radical surgical operation does not necessarily guarantee a complete and final recovery. Pictures are included. Submitted 16 Jul 48.
Mr, Inst of Neurosurg: Prof B. G. Yegorov.

64/49T98

~~VOLYN~~

Recurrence of cerebral arachnoendotheliomas. Vop. neirokhir. 19 no.1:
32-37 Ja-F '55. (MLRA 8:2)

1. Iz Nauchno issledovatel'skogo ordena Trudovogo Krasnogo Znameni
instituta neyrokhirurgii imeni akad. N.N.Burdenko Akademii meditsin-
skikh nauk SSSR.

(BRAIN, neoplasms,
arachnoendothelioma, recur.)

Volynkin, N.M.

VOLYNNIN, N.M.; KOPYLOV, M.B.

Use of partition angiography in arachnoid endothelioma. *Vop. neirokhir.* 19 no.3:27-32 My-Je '55. (MLRA 8:6)

1. Iz Nauchno-issledovatel'skogo ordena Trudovogo Krasnogo Znameni instituta neirokhirurgii imeni akad. N.N.Burdenko Akademii meditsinskikh nauk SSSR.

(BRAIN, neoplasms,
meningioma, cerebral angiography in)

(MENINGIOMA,
brain, angiography in)

(ANGIOGRAPHY,
cerebral, in meningioma)

VOLYNNIN, N.M.

Surgery for frontal cerebral hernia. Vop.neirokhir. 20 no.3:41-42
(MIRA 9:8)
My-Je '56.

1. Iz Nauchno-issledovatel'skogo ordena Trudovogo Krasnogo Znameni
instituta neyrokhirurgii imeni akad. N.N.Burdenko Akademii medi-
tinskikh nauk SSSR.

(ENCEPHALOCOLE
frontal, surg.)

VOLYNKIN, N.M.

Radical therapy of infiltrated forms of a rachnoid endotheliomas of the brain; block resection method. Vop.neirokhir. 20 no.5:13-19
S-0 '56. (MIRA 9:11)

1. Iz Nauchno-issledovatel'skogo ordena Trudovogo Krasnogo Znameni instituta neirokhirurgii imeni akad. N.N.Burdenko Akademii meditsinskikh nauk SSSR.

(BRAIN, neoplasms,
meningioma, radical surg. (Rus))

(MENINGIOMA, surgery,
brain, radical excis. (Rus))

VOLYNKIN, N. M. Doc Med Sci -- (diss) "Recurrence of arachnoidendotheliomas and their surgical treatment." Mos, 1959. 15 pp (Acad Med Sci USSR), 200 copies (KL, 49-59, 142)

-64-

SOV/137-59-5-9717

Translation from: Referativnyy zhurnal, Metallurgiya, 1959, Nr 5, p 33 (USSR)

AUTHOR: Volynkin, N.N.

TITLE: Technical Progress in Small-Scale Metallurgy

PERIODICAL: Tekhn.-ekon. byul. Sovnarkhoz Lipetskogo ekon. adm. r-na, 1958,
Nr 7, pp 17 - 19

ABSTRACT: Information is given on the technological and organizational
measures in the steel smelting shop (electric steel) and on
heat treatment at the Lipetsk Tractor Plant.

P.P.

Card 1/1

VOLYNKIN, N. V.

Kovka rotorov krupnykh turbogeneratorov. (Vestn. Mash., 1948, no. 9,
p. 41-44)

Referst to "Barrikady" plant.

(Forging rotors of heavy-duty turbogenerators.)

DLC: TNL.vh

SO: Manufacturing and Mechanical Engineering in the Soviet Union,
Library of Congress, 1953.

VOLYNKIN, N.V.

Methods for preventing internal flaws of metals. Mashinostroitel'
no.8:34 Ag '62. (MIRA 15:8)
(Founding--Safety measures)

VOLYNKIN, N. V.

PA 37/49T79

USSR/Engineering
Turbogenerators
Forging

Sep 48

"Forging the Rotors of Large Turbogenerators," N. V.
Volynkin, Engr, 3 pp

"Vest Mashinostroy" Vol XXVIII, No 9

Describes method used to forge 100,000-kw turbogenerator-
ator rotor at the "Barakady" plant. Includes
dimensioned sketch of rotor.

FDR

37/49T79

8(0)

SOV/112-59-3-4309

Translation from: Referativnyy zhurnal. Elektrotehnika, 1959, Nr 3, p 5 (USSR)

AUTHOR: Volynkin, V. G.

TITLE: Seasonal Variations of Earth Resistivity in Kirgiziya
(Sezonnyye izmeneniya udel'nykh sопrotivleniy gruntov Kirgizii)

PERIODICAL: Tr. Konferentsii po elektrotravme, 1956, Frunze, AS Kirgizskaya
SSR, 1957, pp 31-35

ABSTRACT: Bibliographic entry.

Card 1/1

LUGOVY, V.S.; APOSTOLATOV, G.A.; VOLYNKIN, V.G.; GRECHKO, G.V.;
ZHUKOV, N.N.

Factors to be considered in calculating and designing electric power
transmission lines in Kirghizistan. Izv. AN Kir. SSR. Ser. est. i
tekh. nauk 1 no. 4:3-32 '59. (MIRA 14:4)
(Kirghizistan--Electric lines)

VOLYNKIN V.G.

LUGOVY, V.S.: LEVITOV, V.I.: VOLYNKIN, V.G.: GRECHKO, G.V.: APOSTOLATOV, G.A.

Experimental basis of electrotechnical research on the "Greater
Naryn" project. Izv. AN Kir.SSR no.4:69-88 '57. (MLRA 10:7)
(Naryn river--Hydroelectric power stations)

VOLYLINKIN, V. I.

24059 VOLYLINKIN, V. I. Poluchenije zadannoy kharakteristiki elektronnoj lampy putem neravnomernogo raspredeleniya toka nasyshcheniya. Trudy Leningr. IN-TA kinoinzhenerov, VIP. 2, 1949, s. 66-77. - Bibliogr: 5 nazv.

SO: Letopis, No. 32, 1949.

OYKS, G.N., doktor tekhn. nauk; BORODIN, D.I.; TSYKIN, L.V.; KAPUSTIN, I.V.;
SOROKIN, A.A.; KUTSENKO, A.D.; ZAGREBA, A.V.; REKHLIS, G.N.;
TRUSEYEV, A.I.; Prinimali uchastiye: GUBENKO, S.M.; POMIN, S.I.;
KUBLITSKIY, A.M.; SAF'YANOV, V.P.; VOLYNKIN, V.M.

Some problems in the hydrodynamics of a converter bath. Met.
i gornorud. prom. no.3:29-31 My-Je '65. (MIRA 18:11)

SHASHIN, M.Ya., kandidat tekhnicheskikh nauk; PETROVA, N.A., inzhener;
VOLYUKIN, V.V.

Comparison criteria for hardening by shot peening processes. Vest.
nash. 35 no.10:37-41 0 '55. (MLRA 9:1)
(Shot peening)

ROGINSKAYA, TS.A., dotsent; MAYERCHIK, A.A., kand.med.nauk; OSMANBEKOVA,
V.Yu., assistant; VOLYKIN, Ya.G., assistant

In memory of Professor Abram L'vovich Brudnyi. Vop. otorin. 21
no. 6:118-119 N-D '59. (MIRA 13:4)
(OBITUARIES)

VOLYNKIN, Ya. G., assistant; STEPANOVA, R. I., assistant

Treatment of acoustic neuritis with novembichine. Vest. otorin.
no.2:81-83 '62. (MIRA 15:2)

1. Iz kliniki bolezney ukha, gorla i nosa (zav. - dotsent Yu. D.
Vasilenko) Kirgizskogo meditsinskogo instituta, Frunze.

(EMBICHINE) (NEURITIS) (ACOUSTIC NERVE—DISEASES)

VOLYNNIKIN, Yu.M.; YAZDOVSKIY, V.I.; GENIN, A.M.; VASIL'YEV, P.V.;
GYURDZHIAN, A.A.; GUROVSKIY, N.N.; GORBOV, F.D.; SERYAPIN,
A.D.; BELAY, V.Ye.; BAYEVSKIY, R.M.; ALTUKHOV, G.V.;
KOPANEV, V.I.; KAS'YAN, I.I.; YEGOROV, A.D.; SIL'VESTROV,
M.M.; SIMPURA, S.F.; TERENT'YEV, V.G.; KRYLOV, Yu.V.; FOMIN,
A.G.; USHAKOV, A.S.; DEGTYAREV, V.A.; VOLOVICH, V.G.;
STEPANTSOV, V.I.; MYASNIKOV, V.I.; YAZDOVSKIY, V.I.; KASHIN,
P.S., tekhn. red.

[First space flights of man; the scientific results of the
medicobiological research conducted during the orbital
flights of the spaceships "Vostok" and "Vostok-2"] Pervye
kosmicheskie polety cheloveka; nauchnye rezul'taty mediko-
biologicheskikh issledovanii, provedennykh vo vremia orbi-
tal'nykh poletov korablei-sputnikov "Vostok" i "Vostok-2."
Moskva, Izd-vo Akad. nauk SSSR, 1962. 202 p. (MIRA 15:11)
(SPACE MEDICINE) (SPACE FLIGHT TRAINING)

VOLYNKIN, Yu.M.; PARIN, V.V.; YAZDOVSKIY, V.I.

Preliminary data on physiological studies during manned space
flight. Probl. kosm. biol. 2:7-10 '62. (MIRA 16:4)
(MANNED SPACE FLIGHT)

VOLYNKIN, Yu. M., SAKSONOV, P. P., ANTIPOV, V. V., and SAVENKO, I. A.,

"Problems of Radiation Safety of Space Flights,"

report submitted for the 14th Intl. Astronautical Federation (IAF) Congress,
Bioastronautics Committee, Paris, France, 25 Sep-1 Oct 63

VOLYNKIN, Yu.M.; GOZULOV, S.A.; GYUNDZHIAN, A.A.; YEREMIN, A.V.; YUGANOV, Ye.M.

Some problems in current aviation medicine; a review of the literature.
Voen. med. zhur. no. 2:61-66 '63.
(MIRA 17:9)

VOLYNKIN, Yu. M., SAKSONOV, P. P., ANTIPOV, V. V., DOROV, N. N., and
NIKITIN, M. D.,

"Ensuring of Radiation Safety During Flights of Soviet Cosmonauts Yu. A. Gagarin,
G. S. Titov, A. G. Nikolayev, and P. R. Popovich."

report submitted for the 14th Intl. Astronautical Federation (IAF) Congress,
Bioastronautics Committee, Paris, France, 25 Sep-1 Oct 63

L 12613-63

EWT(1)/FCC(w)/FS(v)/BDS/EEC-2/ES(a)/ES(b)/ES(c)/ES(k)/EEO-2/
ES(t)-2/ES(v) AFMDC/AFFTC/ASD/ESD-3/APGC P1-4/Po-4/Pq-4/Pb-4/Pe-4 TT/A/GW/DD
ACCESSION NR: AP3001543

S/0216/6:/000/093/0405/0418

AUTHOR: Volynkin, Yu. M., Saksonov, P. P.95
94TITLE: Medico-biological analysis of cosmic flight factors

SOURCE: AN SSR. Izv. Seriya biologicheskaya, no. 3, 1963, 405-418

TOPIC TAGS: space flight, solar flare, weightlessness, space medicine

ABSTRACT: Medico-biological factors of cosmic flights are discussed on the basis of published sources listed in the bibliography. The authors analyze data on biological action of physical conditions and examine certain problems of protecting living organisms from harmful action during cosmic flight. All physical factors encountered in flight are divided into three groups: 1) The first group deals with space as an external environment unique for living organisms in that it has low barometric pressure, a changed gas composition lacking molecular oxygen, ionizing radiation, meteors, and sharp temperature contrasts. 2) The second group deals with dynamic flight factors including engine noise, vibration, acceleration, and weightlessness. 3) The third group deals with life under artificial conditions in a space ship, such as isolation, limited space, restricted movement, eating problems, and microclimate. In

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ACCESSION NR: AP3001543

designing new space ships, new materials and devices are sought to withstand radiation as well as new biological and chemical preparations to increase the organism's resistance to radiation. Solar flares pose a considerable problem in planning protection against radiation. In referring to the Soviet cosmonauts' flights, the dosimeter types and biological specimens carried aloft are mentioned. The least studied of the dynamic factors is weightlessness. The most radical approach to this problem appears to be the creation of artificial gravitation by means of centrifugal force developing with rotation of the space ship. The authors point out that the vastness and complexity of medico-biological problems require the united efforts of all scientists throughout the world to study and utilize outer space "exclusively for peaceful purposes." Orig. art. has: 4 tables.

ASSOCIATION: None

SUBMITTED: 19Oct62 DATE ACQ: 21Jun63 ENCL: 00

SUB CODE: AM NO SOV REF: 022 OTHER: 004

Card 2/2

VOLYNKIN, Yu. M.; PARIN, V. V.; VASILYEV, P. V.;

"The discussion of this review paper will be lead by Prof. Nello PACE (USA)

Report submitted for the COSPAR Fifth International Space Science Symposium, Florence, Italy.
8-20 May 1964.

VOLYNKIN, Yu. M.

"Bioastronautics."

report submitted for 15th Intl Astronautical Cong, Warsaw, 7-12 Sep 64.

VOLYNKIN, Yu.M.; YAZDOVSKIY, V.I., prof.; GENIN, A.M.; CAZENKO, O.G.; GUROVSKIY, N.N.; YEMEL'YANOV, M.D.; MIKHAYLOVSKIY, G.P.; GORBOV, F.D.; SERYAPIN, A.D.; BAYEVSKIY, R.M.; ALTUKHOV, G.V.; KOPANEV, V.I.; KAS'YAN, I.I.; MYASNIKOV, V.I.; TERENT'YEV, V.G.; ERYANOV, I.I.; FEDOROV, Ye.A.; FOMIN, V.S.; ARUTYUNOV, G.A.; ANTIPOV, V.V.; KOTOVSKAYA, A.R.; KAKURIN, L.I.; TSELIKIN, Ye.Ye.; USHAKOV, A.S.; VOLOVICH, V.G.; SAKSONOV, P.P.; YEGOROV, A.D.; NEUMYVAKIN, I.P.; TALAPIN, V.F.; SISAKYAN, N.M., akademik, red.; KOLPAKOVA, Ye.A., red.izd-va; ASTAF'YEVA, G.A., tekhn.red.

[First group space flight; scientific results of medical and biological studies carried out during the group orbital flight of manned satellites "Vostok-3" and "Vostok-4]
Pervyi gruppovoi kosmicheskii polet; nauchnye rezul'taty mediko-biologicheskikh issledovanii, provedennykh vo vremia gruppovogo orbital'nogo poleta korablei-sputnikov "Vostok-3" i "Vostok-4." Moskva, Izd-vo "Nauka," 1964. 153 p.
(MIRA 17:3)

VOLYNKIN, Yu. M.; ANTIPOV, V. V.; GUDA, V. A.; NIKITIN, M. D.; SAKSONOV, P. P.

"The biological evaluation of radiation conditions on the path between the
earth and the moon."

report presented at the 15th Intl Astronautical Cong, Warsaw, 7-12 Sep 64.

VOLYNNIK, Yu.M.; SAKSONOV, P.P.

Physical conditions of space flights and their biological characteristics.
Prøbl. kosm. biol. 3:10-22 '64. (MIRA 17:6)

ACCESSION NR: AP4045262

S/0209/64/000/008/0084/0086

AUTHOR: Volyanikin, Yu. (Lt.Gen., medical corps)

TITLE: Man works in outer space

SOURCE: Aviatsiya i kosmonavtika, no. 8, 1964, 84-86

TOPIC TAGS: space flight, weightlessness, orientation, efficiency, bioelectric activity

ABSTRACT: The author presents a fairly general discussion of the effect of such space-connected factors as weightlessness over a protracted period on man's basic physiological functions, as well as the psycho-emotional effects of these conditions on his orientation in space and his ability to work. Functional disturbances in the sensory analyzers connected with the transition from a state of high "G"-forces to one of weightlessness are briefly mentioned. The problem of the limitations in the objective recording of physiological reactions on board the space capsule and in the transmission of this information to the Earth is also considered, with emphasis on the importance of the orbital flight of German Titov. The "Vostok-3" and "Vostok-4" spaceships (astronauts Nikolayev and Popovich) are mentioned as providing much useful information on the state of higher nervous activity and changes in the vestibular-autonomic sphere. Very little specific in-

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ACCESSION NR: AP4045262

formation on actual instrumentation, however, is given. The Nikolayev-Popovich flight is also analyzed from the point of view of the bioelectric activity of the cerebral cortex, oculomotor activity and the dermal-galvanic reaction (the electrical resistance of the skin). In conclusion, the author notes that the telemetry data on electroencephalography, electrooculography and the dermo-galvanic reaction lead to the conclusion that there were no abnormalities of any kind in the state of the astronauts during the entire duration of the flight, nor were any changes discovered which might point to a definite disruption of the function of the vestibular analyzer. In consequence, after the proper training and preparation, astronauts are able to withstand the conditions of a 3- or 4-day flight with no perceptible reduction in their ability to perform their assigned tasks.

ASSOCIATION: none

SUBMITTED: 00

NO REF SOV: 000

ENCL: 00

OTHER: 000

SUB CODE: PH, SW

Card 2/2

ACCESSION NR: AP4039714

8/0205/64/004/003/0344/0348

AUTHOR: Volyntkin, Yu. M.; Parin, V. V.; Antipov, V. V.; Guda, V. A.; Dobrov, N. N.; Nikitin, M. D.; Saksonov, P. P.

TITLE: Radiation safety measures during flights by Soviet cosmonauts in Vostok space ships

SOURCE: Radiobiologiya, v. 4, no. 3, 1964, 344-348

TOPIC TAGS: manned space flight, Vostok, cosmic radiation, galactic radiation, radiation dosimetry, telemetry, radiobiology

ABSTRACT: Radiation safety measures for cosmonauts in the Vostok series have involved measurements of the integral doses within cabins, conducting biological dosimetric probes of cosmic radiation, and the use of antiradiation pharmaceuticals during emergency situations. The results of radiobiological investigations conducted during the Vostok flights agree with those of other physical probes and indicate that the radiation hazards to be encountered during short space flights are minimal. Clinical examinations of cosmonauts following Vostok flights showed no deleterious effects of cosmic radiation.

Card 1/2

ACCESSION NR: AP4039714

ASSOCIATION: none

SUBMITTED: 29Dec63

DATE ACQ: 19Jun64

ENCL: 00

SUB CODE: PH, LS

NO REF Sov: 008

OTHER: 000

Card: 2/2

VOLYNNIK, Yu.M.; ARUTYUNOV, G.A.; ANTIPOV, V.V.; ALTUKHOV, G.V.;
BAYEVSKIY, R.M.; BELAY, V.Ye.; BUYANOV, P.V.; BRYANOV, I.I.;
VASIL'YEV, P.V.; VOLOVICH, V.G.; GAGARIN, Yu.A.; GENIN, A.M.;
GORBOV, F.D.; GORSHKOV, A.I.; GUROVSKIY, N.N.; YESHANOV, N.Kh.;
YEGOROV, A.D.; KARPOV, Ye.A.; KOVALEV, V.V.; KOLOSOV, I.A.;
KORESHKOV, A.A.; KAS'YAN, I.I.; KOTOVSKAYA, A.R.; KALIHERDIN,
G.V.; KOPANEV, V.I.; KUZ'MINOV, A.P.; KAKURIN, L.I.; KUDROVA,
R.V.; LEBEDEV, V.I.; LEBEDEV, A.A.; LOBZIN, P.P.; MAKSIMOV,
D.G.; MYASNIKOV, V.I.; MALYSHKIN, Ye.G.; NEUMYVAKIN, I.P.;
ONISHCHENKO, V.F.; POPOV, I.G.; PORUCHIKOV, Ye.P.; SIL'VESTROV,
M.M.; SERYAPIN, A.D.; SAKSONOV, P.P.; TERENT'YEV, V.G.; USHAKOV,
A.S.; UDALOV, Yu.F.; FOMIN, V.S.; FOMIN, A.G.; KHLEBNIKOV, G.F.;
YUGANOV, Ye.M.; YAZDOVSKIY, V.I.; KRICHAGIN, V.I.; AKULINICHEV,
I.T.; SAVINICH, F.K.; STIMPIRA, S.F.; VOSKRESENSKIY, O.G.;
GAZENKO, O.G., SISAKYAN, N.M., akademik, red.

[Second group space flight and some results of the Soviet
astronauts' flights on "Vostok" ships; scientific results of
medical and biological research conducted during the second
group space flight] Vtoroi gruppovoi kosmicheskii polet i neko-
torye itogi poletov sovetskikh kosmonavtov na korabliakh
"Vostok"; nauchnye rezul'taty medikobiologicheskikh issledovaniy,
provedennykh vo vremia vtorogo gruppovogo kosmicheskogo poleta.
(MIRA 18:6)
Moskva, Nauka, 1965. 277 p.

"APPROVED FOR RELEASE: 08/09/2001

CIA-RDP86-00513R001860730004-2

VOLYNKIN, Yu.M.; ANTIPOV, V.V.; GUDA, V.A.; NIKITIN, M.D.; SAKSONOV, P.P.

Biological evaluation of radiation conditions on route from
the earth to the moon. Probl. kosm. biol. 4:127-138 '65.
(MIRA 18:9)

APPROVED FOR RELEASE: 08/09/2001

CIA-RDP86-00513R001860730004-2"

VOLYNKIN, Yu.M., general-leytenant meditsinskoy sluzhby; VOSKRESENSKIY, A.D.,
meyer meditsinskoy sluzhby

Medicobiological studies on the multiseat space ship "Voskhod."
(MIRA 18:5)
Voen.-med.zhur. no.11:6-8 '64.

VOLYNNIK, Yu.M.; PARIN, V.V.; ANTIPOV, V.V.; GUDA, V.A.; LOBROV, N.N.;
NIKITIN, M.D.; SAKSCHOV, P.P.

Radiation protection during the flight of Soviet cosmonauts on
"Vostok" space ships. Radiobiologija 4 no.3:344-348 '64.
(MIRA 17:11)

L 24370-66 RSS-2/EWT(1)/ENT(m)/EEC(k)-2/FCG/ENA(h) SCTB TT/DD/GN

ACC NR: AT6003848

SOURCE CODE: UR/2865/65/004/000/0127/0138 77

AUTHOR: Volynkin, Yu. M.; Antipov, V. V.; Guda, V. A.; Nikitin, M. D.; G. I. Bokanov, P. P.

ORG: Department of Biological Sciences, Academy of Sciences USSR (AN SSSR. Otdeleniye biologicheskikh nauk)

TITLE: Biological evaluation of radiation conditions for earth to moon flight

SOURCE: AN SSSR. Otdeleniye biologicheskikh nauk. Problemy kosmicheskoy biologii, v. 4, 1965, 127-138

TOPIC TAGS: bioastronautics, space radiation, solar flare, irradiation dosimetry, radiation shielding

ABSTRACT: The physical characteristics and maximum permissible biological doses of the basic types of cosmic radiation are considered. Radiation doses for primary cosmic radiation from natural and artificial belts with a radiation shield of 1 to 2 g/cm² should not exceed 10 rem for a two week flight around the moon. In case of an emergency return from an altitude of 75,000 km by the least favorable trajectory, the maximum dose would probably be about 20 rem and a radiation shield of 1 to 2 g/cm² would still provide adequate radiation protection for crew

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L 24370-66

ACC NR: AT6003848

members. Proton radiation of solar flares represents a real threat to the health and lives of astronauts. To protect astronauts from solar flares of the type witnessed Aug. 22, 1959, the radiation shield may be increased to 3 g/cm². However, the problem of protection against solar flares of the type witnessed July 10, 1959 and February 23, 1956 cannot be solved technically at this time. The safety of the astronaut can also be increased with the use of solar flare forecasts. Present forecasting methods predict the appearance of solar flares 2 to 3 days in advance with 75% accuracy. Improved forecasting methods should be accompanied by the development of new types of forecasting instruments. Increasing body resistance to proton radiation of solar flares with the use of various pharmaceutical chemical preparations appears promising.

Orig. art. has: 2 tables.

SUB CODE: 06/ SUBM DATE: none/ ORIG REF: 021/ OTH REF: 020

Card 2/2

L 03775-67 FSS-2/ENT(1)/ENT(m)/EEC(k)-2/FCC SCIB TT/DD/RD/GW
ACC NR: AP6028342 SOURCE CODE: UR/0293/66/004/004/0630/0633

AUTHOR: Volynkin, Yu. M.; Antipov, V. V.; Davydov, B. I.; Dobrov, N. N.; Nikitin, M. D.; Pisarenko, N. P.; Saksanov, P. P. 86
B

ORG: none

TITLE: Assurance of radiation safety during the Voskhod-1 and Voskhod-2 flights

SOURCE: Kosmicheskiye issledovaniya, v. 4, no. 4, 1966, 630-633

TOPIC TAGS: space radiation, ~~radiation safety~~, solar flare ~~radiation~~, radiation shielding, radiation dosimetry, nuclear emulsion, radiation ~~radiation~~, EVA, lysogenic bacteria/Voskhod-1, Voskhod-2 ~~spacecraft~~

ABSTRACT: The Voskhod-1 and Voskhod-2 flights were characterized by extremely high orbits (apogee 495 km). It was calculated that Voskhod-2 would have a far higher radiation exposure due largely to the proton component in the area of the Brazilian anomaly, where in the course of 20 min the spaceship would acquire about 80% of the daily dose. The extravehicular surface dose of electrons during 20 min could amount to 1 rad. In order to reduce this to zero a protective layer of 100 mg/cm² is required. Leonov's spacesuit fulfilled this shielding requirement. Since exposure to radiation may reach dangerous proportions during solar flares the following radiation protection measures were taken during the Voskhod-1 and Voskhod-2 flights. A preliminary study was made of radiation conditions on the proposed orbit. Forecasts

UDC: 614.876(202)

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L 03775-67

ACC NR: AP6028342

of the possibility of solar flares were made. The radiation dose was reduced by spacecraft shielding. Changes in the level of radiation in the upper atmosphere were checked by means of balloon sondes. Integral doses and dose rates were measured by on-board radiation meters. Individual dosimeters of the ILK, IKS, and IFKN types and nuclear emulsions were used to measure the total doses acquired by each cosmonaut. Living organisms were carried on board as biodosimeters. Radioprotective drugs were carried for emergency use by the cosmonauts. In order to determine the effect of low-energy electrons during Leonov's EVA the two cosmonauts carried identical sets of dosimeters (on the chest under the spacesuit and in external hip pockets), which were capable of working in high-vacuum conditions. However, Leonov's dose did not exceed Belyayev's. Individual and on-board dosimeters indicated that the total dose received on Voskhod-2 was 70 ± 5 mrad, while that on Voskhod-1 was 30 ± 5 mrad. Analysis of the spectral composition of radiation made by nuclear emulsions indicated the presence of particles with linear energy losses comparable to ions of He, B, O, and Ar. The radiation dose, taking RBE into account, did not exceed several dozen rads. Biological objects carried on Voskhod-1 and Voskhod-2 showed increases in non-disjunction of chromosomes and increases in frequency of dominant lethal mutations in Drosophila, and disruption of the mitotic mechanism in microspores of Tradescantia. These increases, however, were small. Lysogenic bacteria carried on the two Voskhod flights did not show any effect of radiation or other spaceflight factors. Experiments performed by B. B. Yegorov have indicated that various stages of mitosis in Tradescantia microspores possess varying sensitivity to the effects of spaceflight factors. These findings confirmed Yegorov's hypothesis that the chief cause of

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L 03775-67

ACC NR: AP6028342

disruption of the mitotic mechanism is weightlessness and that chromosome reconstructions are due largely to combined factors related to spaceflight takeoff and reentry. Orig. art. has: 2 tables. [BM]

SUB CODE: 06/ SUBM DATE: 21Aug66/ ORIG REF: 006/ ATD PRESS: 5064

Card 3/3 (lll)

ACC NR: AP6033399

SOURCE CODE: UR/0293/66/004/005/0755/0767

AUTHOR: Volynkin, Yu. M.; Akulichhev, I. T.; Vasil'yev, P. V.; Voskresenskiy, A. D.; Kas'yan, I. I.; Maksimov, D. G.

ORG: none

TITLE: Some data on the condition of cosmonauts during the flight of the Voskhod-1 spacecraft

SOURCE: Kosmicheskiye issledovaniya, v. 4, no. 5, 1966, 755-767

TOPIC TAGS: manned spacecraft, space physiology, space medicine, human physiology, cardiovascular system, nervous system, vestibular analyzer/Voskhod 1 spacecraft

ABSTRACT: A diagram of the biomedical monitoring parameters and some results of a further statistical analysis of the Voskhod-1 flight are presented in the following figures and tables. As in other discussions of this flight, the general conclusion was that none of the observed physiological shifts were of a pathological nature, and therefore, were reversible. The most significant finding of the flight was a confirmation of the possible specific effect of weightlessness on the statokinetic

Card 1/6

UDC: 629.198.61

ACC NR: AP6033399

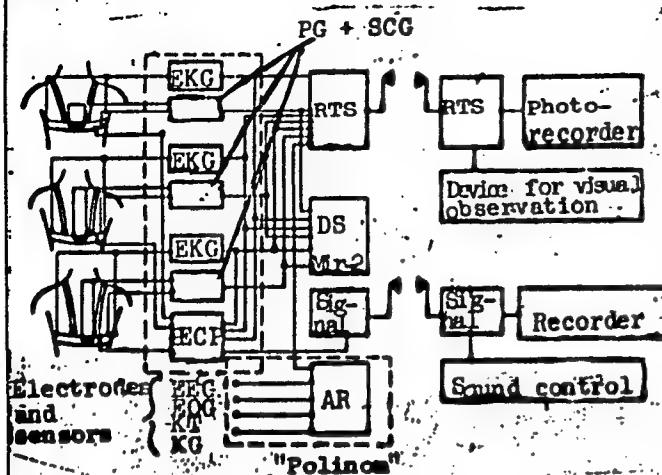


Fig. 1. Block diagram of physiological parameters recorded during the flight of Voskhod-1

EKG - Electrocardiogram; PG, SCG - pneumogram plus seismocardiogram; EEG - electroencephalogram; PECP - pulmoelectrocardiophone; EOG - electrooculogram; KT - coordination test; KG - kinetogram; RTS - radiotelemetry system; DS-Mir-2 - data storage unit; AR - amplifier-readout.

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ACC NR: AP6033399

Cosmonauts	Physiological index	Before flight						After flight	
		6.x	8.x	11.x	4 hr	5 min	1st day	15 th day	
		1964						11. x 1964	Pre-launch
V. M. Komarov	Pulse	70	68	72	87	89	89	80	68
	Respiration	8	12	10	18	23	20	11	10
	Arterial pressure	116	115	120	—	—	—	115	115
		75	70	76	—	—	—	80	75
K. A. Feoktisto	Pulse	80	84	80	78	86	97	84	72
	Respiration	12	16	18	21	20	21	16	11
	Arterial pressure	110	105	125	—	—	—	105	115
		75	75	85	—	—	—	85	80
B. B. Yegorov	Pulse	72	64	64	81	86	95	84	68
	Respiration	14	14	14	18	26	21	10	15
	Arterial pressure	100	105	120	—	—	—	120	110
		70	76	70	—	—	—	90	85

Table 1. Dynamics of the pulse rate, respiration rate, and arterial pressure of the Voskhod-1 cosmonauts before, during, and after the flight (from the data of M. D. Nikitin et al.).

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ACC NR: AP6033399

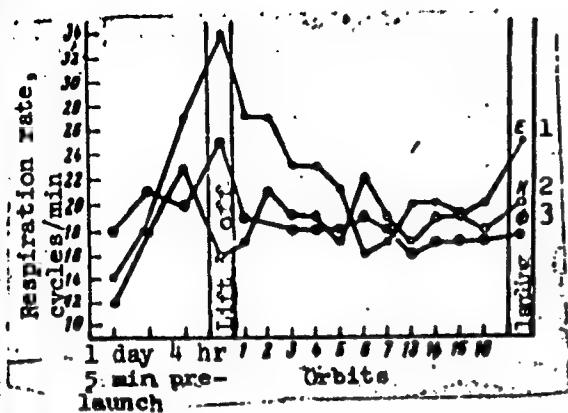


Fig. 2. Dynamics of the average respiratory rates of V. M. Komarov (2), K. P. Feoktistov (3), and B. B. Yegorov (1) before, during, and after the *Voskhod-1* flight

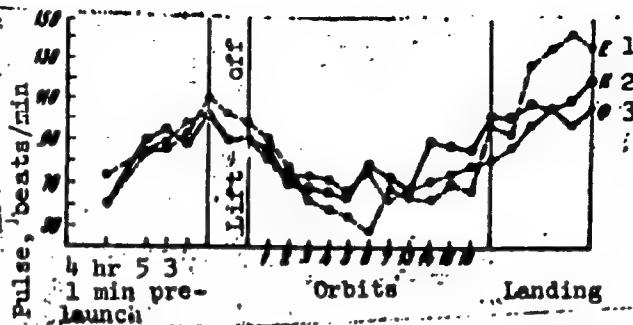


Fig. 3. Dynamics of the average pulse rates of B. B. Yegorov (1), V. M. Komarov (2), and K. P. Feoktistov (3), before, during, and after the *Voskhod-1* flight

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ACC NRI AP6033399

Parameters.	Cosmonauts	12.5 hr before launch	Orbits									
			1	2	3	4	5	6	7	8	9	10
P-Q, sec	V. M. Komarov	0,12	0,10	0,11	0,10	0,12	0,11	0,11	0,11	0,10	0,10	0,10
	K. P. Feoktistov	0,15	0,14	—	0,13	0,16	0,13	0,16	0,14	0,11	0,12	0,12
	B. B. Yegorov	0,12	0,12	0,12	0,13	0,13	0,14	0,14	0,16	0,10	0,12	—
Q-T, sec	V. M. Komarov	0,34	0,34	0,37	0,36	0,37	0,38	0,35	0,38	0,39	0,36	0,34
	K. P. Feoktistov	0,36	0,36	—	0,36	0,37	0,37	0,37	0,42	0,38	0,39	0,37
	B. B. Yegorov	0,33	0,34	0,37	0,38	0,39	0,41	0,44	0,39	0,40	0,38	0,37
R-R, sec	V. M. Komarov	0,69	0,61	0,78	0,70	0,68	0,99	0,61	0,76	0,89	0,71	0,72
	K. P. Feoktistov	0,76	0,69	—	0,82	0,88	0,91	0,90	0,96	0,87	0,82	0,80
	B. B. Yegorov	0,67	0,59	0,73	0,68	0,98	1,13	1,24	0,98	1,03	0,87	—
Systolic, index	V. M. Komarov	49,9	57,7	48,7	51,7	43,7	40,0	58,2	30,7	45,0	51,1	47,2
	K. P. Feoktistov	47,6	52,9	—	44,8	42,4	40,0	41,3	43,3	44,2	47,9	44,8
	B. B. Yegorov	49,3	56,8	50,7	43,4	39,7	36,8	38,8	40,1	38,8	44,8	—

Table 2. Some indices of the cardiac activity of V. M. Komarov (1), K. P. Feoktistov (2), and B. B. Yegorov (3) before and during the flight of Voskhod-1

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ACC NR: AP6033399

Orbits	V. M. Komarov			K. P. Feoktistov			B. B. Yegorov		
	M.sec	sec	C. %	M.sec	sec	C. %	M.sec	sec	C. %
5 min									
- before	0.68	0.07	10.5	0.72	0.076	10.56	0.70	0.073	10.50
1	0.72	0.09	12.8	0.75	0.031	4.16	0.69	0.074	10.74
3	0.87	0.098	11.26	0.84	0.084	9.96	0.94	0.109	11.68
6	0.82	0.075	9.14	0.86	0.074	7.66	1.31	0.044	3.36
13	0.87	0.038	4.34	0.93	0.091	9.80	1.02	0.057	6.58
16	0.74	0.043	8.82	0.81	0.053	6.50	0.98	0.082	8.60

Table 3. Results of a statistical analysis of R-R intervals for V. M. Komarov (1), K. P. Feoktistov (2), and B. B. Yegorov (3) before and during the Voskhod-1 flight

analyzer and its interaction with other analyzers leading to the possible development of prolonged spatial disorientation illusions and prolonged vestibuloautonomic reactions which decrease the work capacity of cosmonauts. Orig. art. has: 4 figures and 4 tables.

SUB CODE: 06/ SUBM DATE: 26May66/ ORIG REF: 010/ OTH REF: 001/ ATD PRESS: 5100

Card 6/6

ACC NR: AF7011642

SOURCE CODE: UR/0000/66/000/000/0001/C006

AUTHOR: Volynkin, Yu. M.; Antipov, V. V.; Davydov, B. I. Dobrov, N. N.;
Nikitin, M. D.; Pisarenko, N. F.; Saksonov, P. P.

ORG: none

TITLE: Radiation safety during the flights of the Voskhod and Voskhod-2
spacecrafts

SOURCE: International Astronautical Congress. 17th, Madrid, 1966. Doklady.
no. 4, 1966. Obespecheniye radiatsionnoy bezopasnosti pri poletakh korabley
"Voskhod" i "Voskhod-2", 1-6

TOPIC TAGS: ionizing radiation biologic effect, proton radiation biologic
effect, EVA, space physiology, space biologic experiment, space flight /
Kosmos-47 space flight, Voskhod-1 space flight

ABSTRACT:

Radiation conditions on the Voskhod-1 trajectory
were forecast using Kosmos-47, a satellite launched
into the proposed orbit shortly before the manned space-
flight. A greater radiation hazard was predicted for

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ACC NR: AT7011642

the Voskhod-2 spacecrew because of the higher orbit and extravehicular activity planned for this flight. Preliminary calculations set the maximum 24-hr dose at 0.1 rad, about 80% of which was expected to accumulate during 20 min spent passing through the region of the Brazilian anomaly. It was calculated that the EVA would expose Leonov to as much as 1 rad of electron radiation in a 20-min period, and that shielding of 100 mg/cm² would be required to eliminate this hazard. Leonov's spacesuit fulfilled the shielding requirement. A total dose of no more than several dozen REM was anticipated for the Voskhod spacecrew for the 24-hr period.

The possibility of radiation injury from solar flare protons was carefully considered. Disruptions of the Earth's geomagnetic field after some solar flares are known to affect the "radiation screen" of the geomagnetic field. Thus, approximate total doses from large flares of the type 10 March 1959 and 12 November 1960 were calculated with different shielding thicknesses, discounting the screening effect of the Earth's magnetic field. (see Table 1)

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ACC NR: AT7011642

Table 1

Energy of protons E, Mev	Shielding of air-equivalent substance, g/cm ²	Dose from flare, rad	
		Nov. 12, 1960	May 10, 1959
E > 40	1.5	550	1120
E > 80	5.0	90	70
E > 100	7.0	50	20
E > 200	24.0	10	1

As can be seen from the table, cosmonauts can receive radiation doses sufficient to disrupt working capacity or endanger life during a solar flare. Consequently, an important part of the radiation safety program consists of predicting potentially hazardous solar flares.

In addition to the measures just described, the Voskhod radiation safety system included measurements of radiation levels in the upper atmosphere using sounding balloons. In addition, a radiometer on the craft measured total dose and dose rate, each cosmonaut carried

Card 3-7

ACC NR: AT7011642

individual dosimeters (ILK, IKS, and IFKN types, and nuclear emulsions), and there were biological dosimeters

on board. Chemical radioprotectors were available for emergency situations.

In order to determine the possible effect of electron radiation during the EVA, both cosmonauts wore an identical set of dosimeters equipped to work in a vacuum, one in the chest area under the suit, and one in the outside hip pocket.

Although the period before the Voskhod-1 launch was one of minimal solar activity, on October 9, 1964, (3 days before the launch) at 8:30 A. M. a 23-fold increase in radioactivity was noted in the upper atmosphere at an altitude of 22 km. The increased radioactivity lasted 2 hr and is still unexplained.

Doses obtained by Voskhod crew members are shown in Table 2.

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ACC NR: A17011642

Table 2. Total radiation doses obtained by crew members on Voskhod-1 and Voskhod-2 spacecraft, in mrad (tissue)

Name of spacecraft	Individual dosimeters		R-ZAM on-board dosimeter	
	average dose for flight, mrad	average dose rate, mrad/day	dose for flight, mrad	dose rate, mrad/day
Voskhod-1	30±5	29±3	27±1	26±1
Voskhod-2	70±5	65±3	65±1	60±1

The total radiation dose received by Leonov was not higher than that obtained by Belyayev due to electron radiation outside the spacecraft, as had been expected. The fact that the absorbed tissue doses received by Voskhod-1 and Voskhod-2 cosmonauts were two and four times higher, respectively, than doses received on the Vostok flights can be explained by the difference in orbits and by some increase in the intensity of primary cosmic radiation characteristic for quiet Sun periods.

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ACC NR: AT7011642

The radiation doses for Voskhod crew members did not exceed several dozen REM each, as calculated. This radiation dose is not considered injurious to human health.

Biodosimeters carried on the Voskhod craft included seeds of higher plants, microorganisms, and fruit flies. In addition, Leonov had pine and wheat seeds and lysogenic bacteria in his hip pocket during the EVA. Analysis of this biological material showed that spaceflight factors had the following effects: mitosis was disrupted in *Tradescantia paludosa* microspores, and there were more dominant lethaliities and cases of nonseparation of chromosomes in *Drosophila*. These shifts were of the same type as those observed in the Vostok-2, -3, and -6 experiments, and were also numerically insignificant. Lysogenic bacteria and plant seeds exposed in open space or kept in the spacecraft did not show the effects of spaceflight factors.

Yegorov's experiment with *Tradescantia* microspores demonstrated that the various mitotic phases of this organism have different sensitivities to spaceflight

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ACC NR: AT7011642

factors. Furthermore, this experiment suggested that weightlessness may be the cause of disrupted mitosis in *Tradescantia microspores*, and that chromosome rearrangements are chiefly caused by factors associated with launch and descent.

Results of biological experiments conducted on the Voskhod spacecraft are in agreement with data from physical dosimeters. Periodic postflight examinations of all Voskhod crew members have also demonstrated the absence of a harmful radiation effect. Orig. art. has: 2 tables.

ATD PRESS: 5098-F

SUB CODE: 06 / SUBM DATE: none / ORIG REF: 006

Card 7/7

VOLYNKINA, G.Yu.; ZAMAKHOVER, Sh.M.

Changes in the galvanic skin response under the effect of
insulin. Biul. eksp. biol. i med. 59 no.4:14-16 Ap '65.
(MIRA 18:5)

1. Laboratoriya patologii vysshey nervnoy deyatel'nosti cheloveka
(zav. - prof. V.I. Butorin) Instituta fiziologii imeni Pavlova
(dir. - akademik V.N. Chernigovskiy) AN SSSR, Leningrad.

L 46178-65
ACCESSION NR: AF50011559

UR/0219/65/059/004/0014/0016

AUTHOR: Volynkina, G. Yu.; Zamakhover, Sh. M.

TITLE: Insulin-induced changes in the cutaneogalvanic reflex

SOURCE: Byulleten' eksperimental'noy biologii i meditsiny, v. 59, no. 4, 1965,

14-16

TOPIC TAGS: insulin, hypoglycemia, conditioned reflex, central nervous system, psychophysiology

ABSTRACT: Insulin was injected intravenously into 22 patients with various psychoses in order to study changes in the cutaneogalvanic reflex, which is known to be highly sensitive to pharmacologic agents, mental strain, and other factors, and is highly sensitive to pharmacologic agents, mental strain, and other factors, and is a component of the orienting reflex. The responses of the patients to insulin were similar to those to local infiltration of the cutaneogalvanic reflex. The changes in the strength of the reflex were observed even before the symptoms of hypoglycemia became apparent. The reflex was inhibited even before the symptoms of hypoglycemia became apparent.

Card 1/2

I 46170-65

ACCESSION NR: AP5011559

were evidently caused by phase changes induced by insulin in the functional state of the subcortical formations, the reticular formation in particular.

ASSOCIATION: Laboratoriya patologii vysshyey nervnoy deyatel'nosti cheloveka, Instituta fizioligii im. I. P. Pavlova AN SSSR, Leningrad (Laboratory of Pathology of Human Higher Nervous Activity, Institute of Physiology, AN SSSR)

SUBMITTED: 18Jan65

ENCL: 00

SUB CODE: LS

NO REF SOV: 003

OTHER: 002

me
Card 2/2

VOLYNKINA, L.

Welcome to the festival! IUn.rat. no.7:2-3 J1 '57. (MIRA 10:8)

1. Zanestitel' zaveduyushchego otdelom propagandy i agitastii
TSentral'nogo komiteta Vsesoyuznogo Leninskogo kommunisticheskogo
soyuza molodezhi.
(Youth--Congresses)

SERGEYEVA-ALAYEVA, V.N.; AVTONEYEVA, N.P.; PROLOVA, R.M.; VOLYNKINA, L.A.;
BOCHKAREV, O.A.; GUSEVA, V.S.

Use of aloe extract and novocaine in combined treatment of parodontitis.
Stomatologiya no.2:22-23 Mr-Apr '54. (MLRA 7:4)

1. Iz stomatologicheskogo otdeleniya (zaveduyushchiy G.A.Kal'yan)
poliklinika No.1 (ispolnyayushchiy obyazannost' zaveduyushchego
A.G.Chernova), Moskva.
(Teeth--Diseases) (Novocaine--Therapeutic use)

Country : USSR F
Category : Microbiology-Antibiosis and Symbiosis. Antibiotics

Abs. Jour : Ref Znur - Biol., No.19, 1958, 85993

Author : Ryabtseva, Z.S.; Bestuzheva, A.P.; Volynkina, O.G.
Institut. : Kirgiz Scientific Research Institute of Epidemiology*
Title : The Influence of Synthomycin on the Agent of Dys-
entery

Orig Pub. : Sb.: Tr. Kirg. N.-I. In-ta Epidemiol., Mikrobiol.,
i Gigiency, 1956, No.2, 38-43

Abstract : Observation was made of a quick adaptation of dys-
entery bacilli to synthomycin (I) in experiments
in vitro, as well as upon treatment of patients
suffering with dysentery. The degree of adjustment
to I was dissimilar in the various strains. I pro-
motes changes in the morphologic features of cul-
tures but apparently has no influence on the bio-
chemical and serologic properties of these organ-
isms. - T.P. Vertogradova

*logy, Microbiology, and Hygiene

Card: 1/1

-13-

SOV/80-j2-2-9/56

AUTHORS: Serebrennikova, M.T., Volynko, K.P., Lotatsevich, E.V.

TITLE: Study of the Solubility in the Systems $\text{CrCl}_3 - \text{NaCl} - \text{H}_2\text{O}$ and $\text{Cr}(\text{NO}_3)_3 - \text{NaNO}_3 - \text{H}_2\text{O}$ (Izuchenie rastvorimosti v sisteh $\text{CrCl}_3 - \text{NaCl} - \text{H}_2\text{O}$ i $\text{Cr}(\text{NO}_3)_3 - \text{NaNO}_3 - \text{H}_2\text{O}$)PERIODICAL: Zhurnal prikladnoy khimii, 1959, Vol XXXII, Nr 2,
pp 291-297 (USSR)ABSTRACT: During the reduction of sodium monochromate in a hydrochloric medium CrCl_3 is formed, in a nitric acid medium $\text{Cr}(\text{NO}_3)_3$. The separation of these salts is investigated here in order to produce chromium oxide from them by decomposition. The investigations were conducted by the isothermal method. The isotherms show a sharp lowering of the solubility of the chromium nitrate in the solution. It has been shown that a residue of 2% of NaNO_3 can not be eliminated from the solution, if the content of $\text{Cr}(\text{NO}_3)_3$ is increased to 59.38% which corresponds to the composition of its crystallized form. The residue of NaNO_3 interacts with chromium oxide forming sodium mono- and bichromate which lowers the output of chromium oxide. The investigations may serve as the base for the

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SOV/80-32-2-9/56

Study of the Solubility in the Systems CrCl_3 - NaCl - H_2O and $\text{Cr}(\text{NO}_3)_3$ - NaNO_3 - H_2O

development of technological processes for the production of chromium oxide.

There are 4 graphs, 2 tables, and 4 references, 3 of which are Soviet and 1 German.

SUBMITTED: June 21, 1957

Card 2/2

VOLYENKO, V.G.

Organization for schools for teaching progressive work methods.
(MIRA 10:3)
Sakh.prom. 30 no.9:6-7 8 '56.

1. Khutor-Mikhaylovskiy rafinadnyy zavod.
(Technical education)

VOLINKO, V.P.
VOLINKO, V.P.

~~Popularize the achievements of inventors and efficiency promoters.~~
Sakh. prom. 32 no.1:9-10 Ja '58. (MIRA 11:2)

1. Khutor - Mikhaylovskiy rafinadnyy zavod.
(Sugar industry)

VOLYKO, V.R.

Method for reconditioning hack-saw blades. Sakh. prom. 30 no.4:
53 Ap '54. (MLRA 9:8)

1. Khuter-Mikhaylovskiy rafinadnyy zavod.
(Hacksaws--Repairing)

VOLYNKO, V.R.

Improving the operation of presses for refined sugar. Sakh.prom.
34 no. 5:28 My '60. (MIRA 14:5)

1. Khutor-Mikhaylovskiy sakharnyy zavod.
(Khutor-Mikhaylovskiy—Sugar industry—Equipment and supplies)

L 51390-65

ACCESSION NR: AP5011967

UR/0348/65/000/002/0011/0012

AUTHOR: Volynshchikov, A. (Senior engineer for special application, Kazan)
TITLE: Aviators and plant protectors. Is their cooperation properly organized?
SOURCE: Zashchita rasteniy ot vrediteley i bolezney, no. 2, 1965, 11-12
TOPIC TAGS: aerial spray, agriculture, pesticide

ABSTRACT: Between 1963 and 1964 the total area of farmland treated from the air against pests and plant disease in the Tatarian ASSR increased from 167 000 to 350 000 hectares. The author lists the agrarian enterprises so treated, the percentage crop increases gained, and the personalities involved. He regrets, however, the failures suffered due to fairly frequent lack of cooperation between the flyers and the farm managers, and he claims that efficiency would be gained, time and money saved, and better results obtained if the arrangements were made, not on an individual basis, but through the Station of Plant Protection acting as an intermediary and a planning body.

ASSOCIATION: none

SUBMITTED: 00

NO REF Sov: 000

Card 1/1 MB

ENCL: 00

OTHER: 000

SUB CODE: LS

VOLYNSHCHIKOV, A.M., starshiy inzh. aviatii spetsprimeneniya (Kazan')

Improve the organization of spraying chemicals from an airplane.
Zashch. rast. ot vred. i bol. 7 no.8:15-16 Ag'62. (MIRA 15:12)
(Tatar A.S.S.R.—Spraying and dusting)
(Tatar A.S.S.R.—Aeronautics in agriculture)

YAMPOL'SKAYA, G.P.; IZMAYLOVA, V.N.; PCHELIN, V.A.; VOLYNSKAYA, A.V.

Solubilization of hydrocarbons of various structure in gelatin
solutions. Vysokom. soed. 7 no.11:1956-1958 N '65.

(MIRA 19:1)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova.
Submitted December 25, 1964.

VOLYNSKAYA, K.B.

Radiation study of the morphogenetic function of the egg nuclei in
Parascaris equorum. Trudy Gel'm. lab. 14:93-97 '64.

(MIRA 17:10)

VOLYNSKAYA, I.A.; YASHANOVA, N.D. (Moskva)

Acute disseminated lupus erythematosus in a family. Arkh. pat.
(MIRA 18:12)
26 no.3:71-74 '64.

1. Patologoanatomiceskoye otdeleeniye (zav. A.S.Suris,
nauchnyy rukovoditel' - prof. Ya.L.Rapoport) Gorodskoy
klinicheskoy bol'nitsy No.6 (glavnnyy vrach N.S.Shev'yakov).

VOLYNSKAYA, L.M.

Seminar on photographic photometry of meteors. Biul.Kom.po
komet.i meteor. AN SSSR no.5:54 '61. (MIRA 14:6)
(Meteors)

S/035/62/000/012/023/064
A001/A101

AUTHOR: Volyns'kaya, L. M.

TITLE: A seminar on photographic photometry of meteors

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 12, 1962, 69,
abstract 12A512 ("Byul. Komis. po kometam i meteoram Astron.
soveta AN SSSR", 1961, no. 5, 54)

TEXT: A conference was held in Kiev in April 1960 which was attended by
the Commission on comets and meteors of the Astronomical Council at AS USSR,
AOIGU, KAO, and others. An instruction for processing the data of IGY and IGC
and also exemplary recommendations for the future were worked out. ✓

[Abstracter's note: Complete translation]

Card 1/1

VOLINSKAYA, L.M.; KAKHGOROV, A.

Photographic photometry of the Echo-1 satellite. Mul.sta.opt.
nabl. isk. sput. Zem. no. 27:29-30 '62. (MIRA 15:12)

1. Stantsiya fotonablyudeniy iskusstvennykh sputnikov Zemli
No.068 Institut astrofiziki AN Tadzhikskoy SSR.
(Artificial satellites—Tracking)

VOLYNSKAYA, L.M.

Effect of sky background on the latent meteor image. Biul. Inst. astrofiz. AN Tadzh. SSR no.37:26-29 '64.

(MIRA 18:1)

KALYAYEVA, S.I.; VOLYNSKAYA, M.

Significance of the seventh thoracic lead in electrocardiography.
Terap. arkh. 27 no.6:76-80 '55. (MIRA 9:2)

1. Iz fakul'tetskoy terapevтической kliniki (dir. prof. T.S.
Istamanova i Leningradskogo meditsinskogo instituta imeni I.P. Pavlova)
(ELECTROCARDIOGRAPHY,
seventh thoracic lead)

USHAKOV, K.I.; BLINOVA, L.A.; VOLYNSKAYA, M.A.; FEL'MAN, R.I.

Briquetting fine copper ores and concentrates. Sbor. nauch.
trud. Gintavetmeta no.23:74-86 '65. (MIRA 18:12)

USHAKOV, K.I.; VOLYNSKAYA, M.A.; BLINOVA, L.A.

Pelletizing oxidized nickel ores. TSvet. met. 36 no.10:21-
25 0 '63. (MIRA 16:12)

USHAKOV, K.I.; BLINOVA, L.A.; VOLYNSKAYA, M.A.

Briquetting finely divided particles of copper ores and con-
centrates. TSvet. met. 35 no.4:12-21 Ap '62. (MIRA 15:4)
(Copper ores) (Briquets)

YROLOVA, V. I., BAN'KOVSKIY, A. I., VOLYNSKAYA, N. B.

Chemical study of alkaloids from *Choisya ternata* H. B. et K.
Med. prom. 12 no. 7:35-40 J1 '58 (MIHA 11:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut lekarstvennykh i
aromaticeskikh rasteniy.
(ALKALOIDS)
(MEXICAN ORANGE)

VOLYNSKAYA, M.P. (Klevtsova); KUZNETSOV, V.A.; BALANOVA, S.Ya.

Electrocapillary phenomena in Tl-Sb alloys. *Zhur.fiz.khim.* ³⁷
no.1:186-189 Ja. '63. (MIRA 17:3)

1. Ural'skiy gosudarstvennyy universitet imeni Gor'kogo.

FROLOVA, V.I.; BAN'KOVSKIY, A.I.; VOLINSKAYA, M.B.

Chemical study of the alkaloids of Choisya ternata. Trudy, VILAR
no. 11;5-15 '59. (MIRA 14:2)
(RUE) (ALKALOIDS)

ALESHKINA, Ya.A.; BEREZHINSKAYA, V.V.; VOLYNSKAYA, M.B.

Sirup of aloe with iron in the treatment of anemia. Med. prom. 13
no. 8:62-63 Ag '59. (MIRA 13:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut lekarstvennykh
i aromaticheskikh rasteniy.
(ALOE) (ANEMIA)

1. VOLYNSKAYA, M. B. ,Prof.
2. USSR (600)
4. Pharmacists - Dnepropetrovsk Province
7. Dnepropetrovsk Province Scientific Society of Pharmacists. Apt. delo. no. 2. '52.

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

ALESHKINA, Ya.A., BEREZHINSKAYA, V.V., VOLYNSKAYA, M.B.

Preparations from restarrow (*Ononis arvensis*). Med.prom. 12
no.10:50-51 0 '58 (MIRA 11:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut lekarstvennykh
i aromaticheskikh rasteniy.
("ESTHARROW")
(GLYCOSIDES)

1. VOLINSKAYA, M. B.
2. USSR (600)
4. Dnepropetrovsk Province--Pharmacists
7. Dnepropetrovsk Province Scientific Society of Pharmacists. Apt. delo no. 2 1952.

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

S/076/63/037/001/019/029
B101/B186

AUTHORS: Volynskaya (Klevtsova), M. P., Kuznetsov, V. A., Balanova, S.Ya.

TITLE: Electrocapillary effects on Tl-Sb alloys

PERIODICAL: Zhurnal fizicheskoy khimii, v. 37, no. 1, 1963, 186 - 189

TEXT: Tl and Sb, chosen because their zero-charge potentials differ considerably, were used to investigate the dependence of the zero-charge potential on the composition of binary alloys. The zero-charge potentials of Tl and Tl-Sb alloys were determined from the maximum potential of electrocapillary curves at 475°C. A mixture of molten LiCl-KCl served as electrolyte and molten lead as reference electrode. Since a solid phase precipitated at 475°C it was not possible to investigate alloys containing more than 63 at% of Sb. The emf of the galvanic elements, type

$Tl^- | LiCl-KCl + 3\% \text{ by weight } TlCl | Tl-Sb^+$ alloy, was measured in order to determine the activities of Tl and Sb. The curves representing the activities differed only slightly from Raoult's law. The electrocapillary curves show that the surface tension acting on the interface alloy-electrolyte decreases with increasing content of Sb, and that the zero-charge potential

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Electrocapillary effects on Tl-Sb alloys

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shifts toward the positive direction. The adsorption of Tl and Sb at the surface, the surface concentration of the two components and the portion θ of the surface occupied by the two components are calculated. The following values are given for the Sb content given in atomic parts (θ_{Tl}, θ_{Sb}): 0.05, 0.82, 0.15; 0.20, 0.65, 0.33; 0.40, 0.52, 0.47; 0.63, 0.30, 0.67. The zero-charge potential was calculated from the equation $\Delta\varphi = \varphi_{all}^0 + \varphi_{Tl}^0 - (\varphi_{Sb}^0 - \varphi_{Tl}^0) \cdot \theta_{Sb}$. For the Sb content in atomic parts, φ_{calcul}^0 and φ_{exper}^0 are given: 0.05, -0.45, -0.53; 0.20, -0.39, -0.46; 0.40, -0.31, -0.42; 0.63, -0.20, -0.30. The discrepancy between the values of φ^0 as calculated and those obtained experimentally is attributed to the fact that the applied equation takes no account of a certain type of interaction of the alloy components. There are 4 figures and 2 tables.

ASSOCIATION: Ural'skiy gosudarstvennyy universitet im. A. M. Gor'kogo
(Ural State University imeni A. M. Gor'kiy)

SUBMITTED: October 28, 1961

Card 2/2

KUZNETSOV, V.A.; SINYANSKAYA, R.I.; PORTNAYA, G.N.; VOLTSKAYA, M.P.

Electrocapillary phenomena in Te-Ag alloys and surface tension
of these alloys in a vacuum. Izv.vys.ucheb.zav.;khim.i khim.tekh.
5 no.3:428-432 '62. (MIRA 15:7)

1. Ural'skiy gosudarstvennyy universitet imeni A.M. Gor'kogo,
kafedra fizicheskoy khimii.

(Tellurium-silver alloys)

(Surface tension)

(Electrocapillary phenomena)

YROLOVA, V. I., BAN'KOVSKIY, A. I., VOLYNSKAYA, M. V.

Chemical study of alkaloids of Phellodendron lauralei Dode.
(MIRA 11:7)
Med.prom. 12 no. 6:16-18 Je '58

1. Vsesoyuznyy nauchno-issledovatel'skiy institut lekarstvennykh
i aromaticheskikh rasteniy.
(PHELLODENDRON)
(ALKALOIDS)

LOGINOV, A.V.; DUMOVA, A.M.; VOLYNSKAYA, S.L.

Changes in vascular reflexes following the administration of chlortetracycline. Antibiotiki 4 no.3:58-62 My-Je '59.
(MIRA 12:9)

1. Laboratoriya fiziologii i farmakologii (zav. A.V.Loginov)
Leningradskogo nauchno-issledovatel'skogo instituta antibiotikov.

(CHLORTETRACYCLINE, eff.
on vasmotor reflexes (Rus))

(BLOOD VESSELS, eff. of drugs on,
chlortetracycline on vasmotor reflexes (Rus))

LOGINOV, A.V.; VOLYNSKAYA, S.L.

Effect of chlortetracycline on interceptive reflexes from the intestine. Biul.eksp.biol. i med. 47 no.6:72-76 Je '59.
(MIRA 12:8)

1. Iz laboratorii fiziologii i farmakologii (zav. - dotsent A.V.Loginov) Leningradskogo nauchno-issledovatel'skogo instituta antibiotikov (dir. - dotsent A.V.Loginov. Predstavlena deystvitel'-nym chlenom AMN SSSR V.N.Chernigovskim.

(INTESTINES, physiol.

eff. of stimulation on blood pressure & resp..

eff. of chlortetracycline (Rus))

(BLOOD PRESSURE, physiol.

eff. of intestinal stimulation after admin. of chlortetracycline (Rus))

(RESPIRATION, physiol.

same)

(CHLORTETRACYCLINE, eff.

on blood pressure & resp. reactions to intestinal stimulation (Rus))